

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-11 are pending in this application. Claims 3 and 9 have been allowed.

Rejections Under 35 U.S.C. §103:

Claims 1-2, 4-8 and 10-11 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Katseff et al (U.S. '796, hereinafter "Katseff") in view of Iyengar (U.S. '601). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, all of the claimed limitations must be taught or suggested by the prior art. Applicant respectfully submits that the combination of Katseff and Iyengar fails to teach or suggest all of the claimed limitations. For example, Applicant submits that the combination fails to teach or suggest a dynamic server computer running a proxylet for transforming data, the proxylet being referred to by an address within a data store connected to a computer network from where the proxylet is available for dynamic downloading by proxy server computers connected to the computer network.

Page 3, lines 3-8 of the Office Action admits the following:

"Katseff does not explicitly teach said dynamic proxy server computer being configured to run a program for transforming data, which program is referred to by an address within a data store connected to the computer network from where the computer program is available for downloading by server computers connected to the computer network, wherein the transforming performed by the dynamic proxy server computer is determined by

the content of a protocol dynamically downloaded from a third server computer.”

In light of the above admission in the Office Action, Katseff fails to teach or suggest a proxylet which is dynamically downloaded by a proxy server computer connected to a network. Applicant submits that Iyengar fails to remedy this deficiency of Katseff. In particular, col. 16, lines 30-42 of Iyengar (specifically identified in the Office Action) merely discloses an applet being downloaded to and executed by a client terminal rather than a proxylet being dynamically downloaded and executed by a dynamic proxy server. For example, col. 16, lines 32-34 states “Here, clients would download all or part of the ‘converter’ logic 416 from the server 410’ to the client for execution.” Col. 16, lines 39-43 of Iyengar further states “In addition, the client will be able to continue conversations even if the server from which the client obtains the applet goes down or becomes unavailable due to network failure.”

It is thus clear that Iyengar discloses downloading and running an applet on a client terminal. Iyengar fails to disclose or even suggest dynamically downloading and executing a proxylet on a dynamic proxy server computer, let alone running the dynamic proxylet on the proxy server computer to transform data from a first format to a second format without substantially changing the information content of the data. Accordingly, even if Katseff and Iyengar were combined as proposed by the Office Action, the combination would not have taught or suggested all of the claimed limitations.

Page 4, line 19 to page 5, line 8 of the Office Action states the following:

“In response to applicant’s argument that the prior art’s teaching of downloading transforming applets are not intended for use specifically for proxy servers, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claims. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Therefore, ‘proxylet’ as claimed, without resulting in structural differences in order to run on proxy servers, are merely small programs.”

This portion of the Office Action appears to allege that a “proxylet” is merely the intended use of a dynamic proxy server and are thus “merely small programs.” Applicant respectfully disagrees. A “proxylet”, which is recited in the body of independent claims 1, 4, 6-7 and 11 and their respective dependents, is not merely an intended use. For example, page 4, line 31 to page 5, line 3 of the specification clearly differentiates a proxylet with an applet. In particular, page 4, lines 31-34 of the specification states the following:

“(In Java computing, an ‘applet’ is a computer program that adds functionality to a browser application and a ‘servlet’ is a computer program that adds functionality to a server. Accordingly, a proxylet adds functionality to a dynamic proxy server.)”

The Office Action thus is clearly incorrect in its allegation that the recitation of “proxylet” in the claims is merely an intended use. The Office Action is clearly incorrect in not affording the claimed “proxylet” patentable weight.

Proxylets are distinguishable from the applets disclosed by Iyengar as evident by the clear definitions provided by the specification and as understood by those skilled in the art.

Not only does Iyengar fail to disclose dynamically downloading a proxylet, Iyengar fails to teach or suggest dynamically downloading a proxylet to a dynamic proxy server computer, let alone the proxylet executing on the proxy server computer transforming data from a first format to a second format. A dynamic proxy server computer is clearly distinguishable from the client terminal disclosed by Iyengar. In particular, Fig. 1 and page 4, lines 1-34 of the specification clearly defines that a client computer (e.g., client computer 30 disclosed in Fig. 1 of the application) is different than a dynamic proxy server computer (e.g., dynamic proxy server computer 20 or 40 as illustrated in Fig. 1 of the application). As those skilled in the art will readily appreciate, a dynamic proxy server computer has different functionality and properties than a client computer.

A client computer may be operated by a user who is not technically trained, whereas servers such as proxy servers are expected to be operated by more technically capable operators. As such, it is useful for client computers to have as simple as possible a process for enhancing functionality of their web browsers. Applets provide this capability by enabling a user to download an applet simply by clicking on a link in a webpage currently being viewed. This virtually entails the client computer downloading the applet with little or no additional input from the user. This is useful because the user is typically not expected to be technically

competent to control the installation of new applets in a more explicit manner.

However, there are security risks associated with downloading an applet from a webpage since an incompetent user could inadvertently download an unwanted applet which could perform undesired functions on the receiving client computer.

To secure against this possibility, applets are often extremely limited on what they can do.

Servlets run on servers (and thus proxylets run on dynamic proxy servers) are different. In this case, operators are typically assumed to be technically competent. As such, operators can explicitly alter the functionality of their servers themselves. This minimizes the need for self-installing servlets.

Applets are thus suitable for use in browsers installed in client computers and proxylets are suitable for use in dynamic proxy servers. The present inventors were the first to consider downloading proxylets on devices within an “intervening” part of a network such as proxy servers. Through this realization, the present inventors have provided the enormous benefit of enabling an active network to be realized. In this way, intermediate nodes such as dynamic proxylet servers between a web server and a client computer can perform useful functions in addition to simple switching, caching or redirecting. In particular, by enabling the dynamic proxy server computer to dynamically download and run proxylets by reference to an address, it is possible for an unknown and untrusted end user to request that an intermediate dynamic proxy server carry out some arbitrary function and (provided the dynamic proxy server is suitably enabled) the dynamic

proxy server simply download and install the relevant proxylet to perform that function in a manner which appears to the user of the client computer to be on the fly.

Page 5, lines 9-14 of the Office Action states the following:

“Here, Katseff teaches the method of converting data from one format to another at a proxy server. Iyengar teaches dynamically downloading transformation programs used to convert data. However, the teachings of Iyengar is not limited only to use by client computers. Iyengar’s applets may be implemented by proxy servers as well as client computers with no structural differences in the applet.”

However, the Office Action provides no support for the extraordinary allegations that Iyengar is not limited to use by client computers and Iyengar’s applets may be implemented by proxy servers with no structural differences in the applet. Applicant is unaware, prior to the present invention, of any proxy servers which had the capability to download and run proxylets as claimed. Prior to the present invention, it had not been considered that proxy servers should be modified except by the administrator of the server. The applets disclosed by Iyengar are clearly designed to be run on client computers. There is no teaching or suggestion that the applets disclosed by Iyengar can be run on a dynamic proxy server.

Accordingly, Applicant respectfully submits that claims 1-2, 4-8 and 10-11 are not “obvious” over Katseff and Iyengar and therefore respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

FRY et al.
Application No. 09/088,727
May 13, 2004

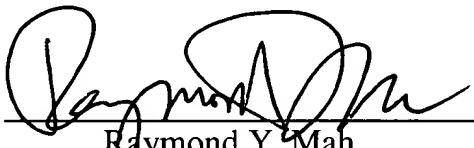
Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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